# Kahane "Our Cosmic Insignificance" Notes

K says that scientists tell us:

- The universe is more than 13 billion years old.
- The diameter of the part of the universe we are able to observe is at least 93 billion light years long.
- Our own planet circles a star located two thirds of the way out of the center of the Milky Way galaxy which contains 100-400 billion stars.
- The observable universe contains around 300 sextillion stars.
- On the whole the universe is almost entirely empty, an unending cold intergalactic night.

We float in this immense cosmos "like a mote of dust in the morning sky." – Carl Sagan

We are "just a chemical scum on a moderate-sized planet orbiting around a very average star in the outer suburb of one among a hundred billion galaxies." - Stephen Hawking

K says that many people take our cosmic insignificance in light of these facts to be an obvious truth. But he asks:

- Are we really cosmically insignificant?
- Why should we be insignificant just because the universe is so vast?
- What is the connection between the vastness of the universe and our significance or insignificance?

K notes that philosophers often dismiss these questions and don't think much about them because they think questions about cosmic significance are confused or have an obvious answer. Philosophers often think these questions are confused. They think its just people worrying that somehow the size of the universe would mean hat nihilism is true.

K says he is going to show that philosophers are wrong to dismiss these questions. He promises to show us that:

- Cosmic insignificance is different from nihilism
- There is a way of testing for significance and insignificance that makes it easy to see why the size of the universe would make us feel insignificant.
- Given K's test, it might turn out that we are of immense cosmic significance. But we can't know for sure just yet. It is an open question

### Nihilism vs Insignificance

Philosophers sometimes say:

"If nothing matters, then it doesn't matter that nothing matters."

"If nothing is good or bad, then it isn't bad that nothing is good or bad."

#### They also say:

"If there is no objective value, it wouldn't matter whether the universe is big and vast or the size of a match box. There would still be no objective value."

"If there is objective value, then it would still be there even if the universe is infinitely vast and cold and dark."

So it is correct to separate out questions of cosmic significance from questions about the existence of objective value and nihilism.

Maybe there is a tension between naturalism and atheism, on the one hand, and objective value or the denial of nihilism, on the other hand. But K says that that is a different issue from the one of cosmic significance.

## **Intrinsic Goodness and Badness vs Insignificance**

Intrinsic Goodness (Badness): Something that is good (bad) in and of itself and not because of its relations to anything else.

• Pain: Its bad in and of itself. Doesn't matter if it occurs in David or Goliath.

Pain is just as bad if it occurs in a tiny or a big universe, a tiny or big person, in the center of the universe or in a corner of the universe.

### The Test for Significance and Insignificance

"For something to be important, it needs to possess, or bring about enough value to make a difference.... If something is insignificant, then its not noteworthy, not important enough to care about."

For something to be significant it:

- Must have value
- Needs to make a real difference
- Needs to be important
- Needs to be something worthy of paying attention to.

### **Importance**

*Stubbed Toes*: Think about all the people stubbing their toes right now. They experience pain but it is bad. And yet, we can't pay attention to all of their sufferings. Toe stubbing is so common that it is unimportant. And it is so tiny compared to things like the holocaust that it is unimportant. So it has negative value. But it is unimportant

*Math Problem*: When a kid successfully solves a math problem, there is something good about it. But so many kids have successfully solved so many math problems that it is insignificant. And a few child geniuses have solved much more impressive math problems. So a kid solving a math problem has value but it is insignificant.

"Seen alongside the horrific (or the wonderful), many things become simply insignificant—worthy of no attention at all. If you witness a terrible tragedy, it would be inappropriate to obsess about a stain on your suit. After spending a week attending to soldiers injured and disfigured in the civil war, Whitman wrote to his mother that "... really nothing we call trouble seems worth talking about."

- Value can't be changed by the presence or absence of other stuff. But significance can.
- Significance can vary even as value stays fixed.
- Taken from a broad perspective, something that is valuable can have its significance decline to the point that it no longer matters.

Even if nihilism is false, even if our lives have lots of value, we still might be utterly unimportant and make no difference at all.

#### **Cosmic Significance**

We can consider the significance of something by asking how much attention it deserves *all things considered*. And we can consider significance at different scales.

- a dorm room
- Auburn's campus
- Alabama
- US
- World
- Milky Way galaxy

**Cosmic Significance**: The attention something deserves when literally all things are considered.

We can now explain why we feel insignificant in the face of a vast universe. Things tend to dramatically lose their significance as you zoom out and broaden the context. What seems significant relative to just your dorm room seems insignificant relative to all of Auburn. But there are lots of other great college towns like Auburn. And there are lots of other great things in the world besides college towns.... When we zoom out to the Final History of the World, how can we expect anything about humanity to matter?

- We're just a mere dot in a vast universe. How can anything human matter?
- Even the worst human tragedy seems to deserve no cosmic concern.
- We're competing for attention with a vast totality. How could this tiny speck deserve even a fraction of attention with all the stuff in the universe.

"The bigger the picture we survey, the smaller the partof any point within it, and the less attention it can get... When we try to imagine viewpoint encompassing the entire universe, humanity and its concerns seem toget completely swallowed up in the void."

#### Are we really Cosmically Insignificant?

When we think about zooming out and taking the cosmic standpoint, we imagine:

• Looking at an image of space from a distant planet in which you can't see the earth at all.

Its true that if there is someone suffering in the Andromeda galaxy right now, I don't pay it much attention. But that is because I just don't know if someone is suffering there or not. I'm too far away to see what is going on. And so someone looking at earth from such a distance wouldn't pay the suffering here much mind either.

K tells us not to confuse the cosmic standpoint with seeing things at a distance. He tells us not to take the visual metaphor too literally. When we adopt the cosmic standpoint:

- We don't become more ignorant and know less than we do now.
- We will still know about the lives of people here on earth and we will still recognize their value.
- We are valuable from the cosmic standpoint.
- The question is: seen from the cosmic standpoint, do we and our value *matter*?

"What is most striking about the immensity that surrounds us is that it is verynearly empty. And even when it is not mere empty space, it very nearly containsnothing of value—in itself it in no way matters if a lifeless gas giant explodes, or ifa cosmic cloud is devoured by a black hole."

## Why we might be of Immense Cosmic Significance

Because the universe is so vast and we are so small, it might take an observe a long time to find us. But the observer might find nothing else of value. We tend to forget how much empty space is in the universe and how much of little worth compared to us is out there.

- Compared to us, who cares about whether a black hole swallows a star? We are way more interesting and awesome than that.
- The relevant question is: Are there other beings like us? Are we alone?

#### If we are alone...

- Then we are the *only things that matter* in the universe. We are the only things that are cosmically significant.
- Humans posses the most value in the cosmos and are the greatest part of total cosmic value. What happens to us determines the value of the universe. If we create hell on earth, then we make the universe itself bad. If we become extinct, that might be the end of value in the universe.
- If we are alone, then as pathetically small as we are, we are also of immense cosmic significance.

"If we are the only ones then, ironically, the cosmic standpoint ends up largely overlapping with our current terrestrial concerns, focused almost exclusively onsentient and intelligent life on the surface of a tiny planet surrounding a humdrumstar in an (otherwise) unremarkable galaxy."

On this picture we get cosmic significance from the combo of our having value plus our being surrounded by a bunch of other stuff with little or no value.

Our significance increases the more empty the universe is. And the shorter amount of time that humans are here, the more significant we are. If human life is just a brief blip in history surrounded by darkness on both sides, then we are all the more significant.

We could also posses significance if we are not alone but we stand out. If every other planet in the universe is covered with grass and cows, we would still be of immense cosmic significance.

#### If we are not alone...

We would lose much of our uniqueness.

Our significance would be diluted and the cosmic spotlight would no longer be on us.

Our achievements, failures, and extinction wouldn't matter as much.

It would be even worse if our achievements pale in comparison to those of numerous far more advanced civilizations.

If God exists, then we are really, really cosmically insignificant. We are still very valuable. But our cosmic significance vanishes next to God.